## Delaware State Clearinghouse Committee October Agenda

## October 30, 2018

| Item    | SA#            | # Applicant Project Title Funding  |   |              |             |           |         |       |       |
|---------|----------------|--|---|--------------|-------------|-----------|---------|-------|-------|
|         |                |  | 7.54050.7135  | Federal      | State       | Other     | Federal | State | Other |
| New Bu  | usiness*       | _  |   |              |             |           |         |       |       |
| 1       | <u>3749</u>    | Department of Health and Social Services, Services for Aging and Adults with<br>Physical Disabilities, Administration/Community Services | Innovations in Nutrition Programs and Services Grant  | \$500,000    | \$173,642   | \$0       | 0.00    | 0.89  | 0.00  |
| 2       | <u>3826</u>    | Department of Health and Social Services, Substance Abuse and Mental Health, Community Mental Health                                     | Promoting Integration of Primary and Behavioral Health Care   | \$10,000,000 | \$0         | \$0       | 0.00    | 0.00  | 0.00  |
| 3       | <u>3831</u>    | Department of Health and Social Services, Substance Abuse and Mental Health, Administration  | State Opioid Response (SOR) Grant   | \$25,100,000 | \$0         | \$0       | 0.00    | 0.00  | 0.00  |
| 4       | 3829           | Department of Safety and Homeland Security, Office of the Secretary, Delaware Emergency Management Agency                                | Emergency Management Performance Grant  | \$3,238,193  | \$2,243,382 | \$994,811 | 29.10   | 8.40  | 0.00  |
| 5       | <u>3812</u>    | Department of Agriculture, Forest Service  | FY18 Chesapeake Tree Stewards Program   | \$158,720    | \$158,720   | \$0       | 0.00    | 0.33  | 0.00  |
| 6       | 2018-06-08-01  | Department of Agriculture, Plant Industries  | The National Association of State Departments of Agriculture Spotted Lanternfly   | \$12,000     | \$0         | \$0       | 0.00    | 0.00  | 0.00  |
| Continu | ued            | _  |   |              |             |           |         |       |       |
| 7       | <u>3830</u>    | Executive, Criminal Justice, Criminal Justice Council  | Family Violence Prevention and Services Act   | \$811,104    | \$10,665    | \$192,637 | 0.57    | 0.10  | 0.00  |
| 8       | <u>3739</u>    | Other Elective, Insurance Commissioner, Bureau of Examination, Rehabilitation and Guaranty   | Medicare Improvements for Patients and Providers Act  | \$76,178     | \$0         | \$0       | 0.00    | 0.00  | 0.00  |
| 9       | <u>3815</u>    | Legal, Department of Justice   | Internet Crimes Against Children  | \$269,101    | \$0         | \$0       | 2.00    | 0.00  | 0.00  |
| 10      | <u>3816</u>    | Legal, Department of Justice   | Medicaid Fraud Control Unit   | \$1,797,306  | \$599,102   | \$0       | 13.75   | 4.25  | 0.00  |
| 11      | <u>3824</u>    | Legal, Department of Justice   | Victims Compensation Assistance   | \$1,270,000  | \$0         | \$0       | 0.00    | 0.00  | 0.00  |
| 12      | <u>3801</u>    | Department of State, Historical and Cultural Affairs, Office of the Director   | Historic Preservation Grant-in-Aid  | \$541,155    | \$380,118   | \$21,648  | 5.40    | 4.25  | 0.00  |
| 13      | <u>3623</u>    | Department of Health and Social Services, Social Services  | Supplemental Nutrition Assistance Program - Electronic Benefits Transfer State Exchange                                     | \$3,000      | \$0         | \$0       | 0.00    | 0.00  | 0.00  |
| 14      | <u>3678</u>    | Department of Health and Social Services, Visually Impaired, Visually Impaired Services  | Independent Living Services for Older Individuals Who Are Blind   | \$225,000    | \$300,008   | \$0       | 2.80    | 4.80  | 0.00  |
| 15      | 3610 Amendment | Department of Health and Social Services, Public Health, Community Health  | Childhood Lead Poisoning Prevention Program   | \$109,809    | \$0         | \$0       | 0.00    | 0.00  | 0.00  |
| 16      | <u>3797</u>    | Department of Health and Social Services, Public Health, Community Health  | Improving Sexually Transmitted Disease Programs through Assessment, Assurance, Policy Development and Prevention Strategies | \$1,965,965  | \$0         | \$0       | 3.00    | 0.00  | 0.00  |
| 17      | <u>3806</u>    | Department of Health and Social Services, Public Health, Community Health  | Tuberculosis Elimination Program  | \$182,463    | \$0         | \$0       | 1.05    | 0.00  | 0.00  |
| 18      | 3809           | Department of Health and Social Services, Public Health, Community Health  | Integrated HIV/AIDS Prevention  | \$1,039,019  | \$0         | \$0       | 3.35    | 0.00  | 0.00  |
| 19      | <u>3810</u>    | Department of Health and Social Services, Public Health, Community Health  | Integrated HIV/AIDS Core Surveillance   | \$314,308    | \$0         | \$0       | 3.85    | 0.00  | 0.00  |
| 20      | <u>3825</u>    | Department of Health and Social Services, Substance Abuse and Mental Health, Community Mental Health                                     | Projects for Assistance in Transition from Homelessness   | \$300,000    | \$100,000   | \$0       | 0.00    | 0.00  | 0.00  |

| 21     | <u>3827</u>    | Department of Health and Social Services, Substance Abuse and Mental Health, Administration               | Substance Abuse Prevention and Treatment Block Grant   | \$6,968,530  | \$92,484    | \$0       | 3.20  | 0.80 | 0.00 |
|--------|----------------|---|--|--------------|-------------|-----------|-------|------|------|
| 22     | <u>3756</u>    | Department of Natural Resources and Environmental Control, Office of the Secretary, Environmental Finance | Drinking Water State Revolving Fund  | \$11,107,000 | \$2,221,400 | \$0       | 23.20 | 0.00 | 0.00 |
| 23     | <u>3813</u>    | Department of Natural Resources and Environmental Control, Office of Natural Resources, Fish and Wildlife | Delaware's Rare Plant Conservation Program   | \$9,000      | \$3,000     | \$0       | 0.00  | 0.02 | 0.00 |
| 24     | <u>3833</u>    | Department of Natural Resources and Environmental Control, Office of Natural Resources, Fish and Wildlife | Recreational Boating Safety Financial Assistance   | \$887,504    | \$887,504   | \$0       | 8.20  | 9.80 | 0.00 |
| 25     | 3808           | Department of Safety and Homeland Security, Office of the Secretary, Developmental Disabilities Council   | Developmental Disabilities Council   | \$507,546    | \$20,000    | \$80,000  | 4.00  | 0.00 | 0.00 |
| 26     | <u>3828</u>    | Department of Safety and Homeland Security, State Police, Criminal Investigation                          | Delaware Information and Analysis Center Maritime Enhancements   | \$395,646    | \$123,925   | \$0       | 0.00  | 0.00 | 0.00 |
| 27     | <u>3835</u>    | Department of Safety and Homeland Security, Office of the Secretary, Delaware Emergency Management Agency | Homeland Security Grant Program  | \$3,980,000  | \$0         | \$0       | 2.75  | 0.00 | 0.00 |
| 28     | <u>3832</u>    | Department of Transportation, Planning  | High Priority Innovative Technology Deployment/Commercial Vehicle Information Systems and Networks                         | \$1,699,026  | \$299,828   | \$0       | 0.00  | 0.00 | 0.00 |
| 29     | 3839           | Department of Transportation, Planning  | Statewide Continuous Aviation System Planning  | \$108,000    | \$12,000    | \$0       | 0.00  | 0.00 | 0.00 |
| 30     | 3527 Amendment | Department of Agriculture, Plant Industries   | Spotted Lanternfly Survey and Outreach   | \$75,000     | \$0         | \$0       | 0.00  | 0.00 | 0.00 |
| 31     | <u>3725</u>    | Department of Agriculture, Food Products Inspection   | Cross Utilization  | \$215,340    | \$0         | \$0       | 4.15  | 0.00 | 0.00 |
| 32     | 2018-07-30-01  | Department of Education, Caesar Rodney School District  | Dover Air Force Base School Budget   | \$9,254,433  | \$0         | \$0       | 0.00  | 0.00 | 0.00 |
| 33     | 2940 Amendment | Department of Education   | Early Head Start Expansion   | \$5,313,600  | \$1,328,400 | \$0       | 1.80  | 0.00 | 0.00 |
| Higher | Education      | _   |  |              |             |           |       |      |      |
| 1      | 2018-10-06-01  | HE/University of Delaware   | Kinetic Alfven Wave Turbulence in the Solar Wind   | \$504,145    | \$0         | \$0       |       |      |      |
| 2      | 2018-10-06-02  | HE/University of Delaware   | Activity Promotion in Veterans after Total Knee Replacement (Activate): A Pragmatic Clinical Trial                         | \$0          | \$0         | \$553,073 |       |      |      |
| 3      | 2018-10-06-03  | HE/University of Delaware   | LEAP-HI: Embedding Regional Hurricane Risk Management in the Life of a Community: A Computational Framework REU Supplement | \$10,000     | \$0         | \$0       |       |      |      |
| 4      | 2018-10-06-04  | HE/University of Delaware   | The Mechanisms Underlying Posterior Capsular Opacification   | \$30,000     | \$0         | \$0       |       |      |      |
| 5      | 2018-10-06-05  | HE/University of Delaware   | Neurocognitive Function and Musculoskeletal Injury in Physically Active Service Members and Civilians                      | \$0          | \$0         | \$198,919 |       |      |      |
| 6      | 2018-10-06-06  | HE/University of Delaware   | Field Tests of Biochar Application to Roadway Soils in New Castle County, DE   | \$0          | \$0         | \$34,441  |       |      |      |
| 7      | 2018-10-06-07  | HE/University of Delaware   | Decentralized Coordinated Behavior of a Network of Autonomous Systems and Sensors  | \$480,769    | \$0         | \$0       |       |      |      |
| 8      | 2018-10-06-08  | HE/University of Delaware   | Rural Economic Development Innovation (REDI)- FY18 Cooperative Agreement   | \$40,462     | \$0         | \$0       |       |      |      |

| 2018-10-06-09 | HE/University of Delaware   | Advancing Consumer Acceptance of Food Pro<br>Traditional Irrigation Water: Lessons from the I<br>Applicability to the U.S.  |
|---------------|---|---|
| 2018-10-06-10 | HE/University of Delaware   | Prosper-University of Delaware Collaboration  |
| 2018-10-06-11 | HE/University of Delaware   | Immune and Metabolic Kinome Analysis of Ani<br>Formulation, Disease and Food Safety   |
| 2018-10-06-12 | HE/University of Delaware   | Investigations of Hydrocarbon Reservoirs through  |
| 2018-10-06-13 | HE/University of Delaware   | Exploring the Space of CHO Extracellular Vesi<br>Applications   |
| 2018-10-06-14 | HE/University of Delaware   | Neurobiology of Language Recovery in Aphasi   |
| 2018-10-06-15 | HE/University of Delaware   | Information Metrics for Reliable Uncertainty Qu<br>Stochastic Models of Deforming Materials Unc   |
| 2018-10-06-16 | HE/University of Delaware   | Unraveling Fibrosis with Dynamic Microenviron   |
| 2018-10-06-17 | HE/University of Delaware   | Center for Behavioral and Experimental Agri-E<br>Research (CBEAR)   |
| 2018-10-06-18 | HE/University of Delaware   | Implementation of Injury Prevention Programs<br>Musculoskeletal Injuries Subsequent to Sport-<br>Control Trial  |
| 2018-10-06-19 | HE/University of Delaware   | PIRE: Bio-Inspired Materials and Systems  |
| 2018-10-06-20 | HE/University of Delaware   | 4-H National Mentoring Program (NMP9)   |
| 2018-10-06-21 | HE/University of Delaware   | Attitudes and Behaviors of Undergraduate Die Food Production Practices  |
| 2018-10-06-22 | HE/University of Delaware   | Highly Accurate Glove-Based Textile Sensors Recognition   |
| 2018-10-06-23 | HE/University of Delaware   | Anxiety in Transition: The Role of Myelination of Anxiety During Emerging Adulthood   |
| 2018-10-06-24 | HE/University of Delaware   | 2018 Proposal for Special Initiative on Offshore  |
| 2018-10-06-25 | HE/University of Delaware   | NSF Collaborative Research: CDS+E-MSS: E<br>Computational Topology (ExHACT)   |
| 2018-10-06-26 | HE/University of Delaware   | Static and Cyclic Load Responses of RC Bear with Multifunctional Composites   |
|               | 2018-10-06-10 2018-10-06-11 2018-10-06-12 2018-10-06-13 2018-10-06-14 2018-10-06-15 2018-10-06-16 2018-10-06-17 2018-10-06-19 2018-10-06-20 2018-10-06-21 2018-10-06-22 2018-10-06-23 2018-10-06-24 2018-10-06-24 | 2018-10-06-10 HE/University of Delaware 2018-10-06-11 HE/University of Delaware 2018-10-06-12 HE/University of Delaware 2018-10-06-13 HE/University of Delaware 2018-10-06-14 HE/University of Delaware 2018-10-06-15 HE/University of Delaware 2018-10-06-16 HE/University of Delaware 2018-10-06-17 HE/University of Delaware 2018-10-06-18 HE/University of Delaware 2018-10-06-19 HE/University of Delaware 2018-10-06-20 HE/University of Delaware 2018-10-06-21 HE/University of Delaware 2018-10-06-22 HE/University of Delaware 2018-10-06-23 HE/University of Delaware 2018-10-06-24 HE/University of Delaware |

| Advancing Consumer Acceptance of Food Produced with Sustainable, Non-<br>Fraditional Irrigation Water: Lessons from the Israeli Experience/Testing<br>Applicability to the U.S. | \$0         | \$0 | \$149,799 |
|---|-------------|-----|-----------|
| Prosper-University of Delaware Collaboration  | \$0         | \$0 | \$156,164 |
| mmune and Metabolic Kinome Analysis of Animal Samples to Study Feed Formulation, Disease and Food Safety  | \$10,000    | \$0 | \$0       |
| nvestigations of Hydrocarbon Reservoirs through Metagenomics and Biological Methane Oxidation   | \$0         | \$0 | \$327,389 |
| Exploring the Space of CHO Extracellular Vesicles (EVs) & their Potential Applications  | \$0         | \$0 | \$92,000  |
| Neurobiology of Language Recovery in Aphasia: Optimizing treatment outcomes   | \$0         | \$0 | \$7,740   |
| nformation Metrics for Reliable Uncertainty Quantification in Materials Design Stochastic Models of Deforming Materials Undergoing Chemical Decomposition                       | \$0         | \$0 | \$136,740 |
| Unraveling Fibrosis with Dynamic Microenvironments and Molecular Tools  | \$1,500,002 | \$0 | \$0       |
| Center for Behavioral and Experimental Agri-Environmental and Risk Management Research (CBEAR)  | \$918,409   | \$0 | \$0       |
| mplementation of Injury Prevention Programs to Reduce the Risk of<br>Musculoskeletal Injuries Subsequent to Sport-Related Concussion: A Randomized<br>Control Trial             | \$0         | \$0 | \$940,710 |
| PIRE: Bio-Inspired Materials and Systems  | \$4,700,615 | \$0 | \$0       |
| I-H National Mentoring Program (NMP9)   | \$0         | \$0 | \$184,002 |
| Attitudes and Behaviors of Undergraduate Dietetics Students Toward Alternative Food Production Practices  | \$0         | \$0 | \$2,000   |
| dighly Accurate Glove-Based Textile Sensors for Robust Hand and Finger Recognition  | \$0         | \$0 | \$96,762  |
| Anxiety in Transition: The Role of Myelination & Testosterone on Pathological Anxiety During Emerging Adulthood   | \$0         | \$0 | \$7,500   |
| 2018 Proposal for Special Initiative on Offshore Wind   | \$0         | \$0 | \$149,020 |
| NSF Collaborative Research: CDS+E-MSS: Exact Homological Algebra for Computational Topology (ExHACT)  | \$292,151   | \$0 | \$0       |
| Static and Cyclic Load Responses of RC Beam-Column-Slab Joints Reinforced with Multifunctional Composites   | \$0         | \$0 | \$215,631 |

| 27 | 2018-10-06-27 | HE/University of Delaware | Jeremy Tobacman, Visiting Scholar, Bureau of Consumer Financial Protection  | \$16,616    | \$0 | \$0       |
|----|---------------|---------------------------|---|-------------|-----|-----------|
| 28 | 2018-10-06-28 | HE/University of Delaware | Digitizing Documentation of the Lost and Disappearing Historic Architecture of the Mid-Atlantic   | \$0         | \$0 | \$130,015 |
| 29 | 2018-10-06-29 | HE/University of Delaware | Microstructural Design of Highly Aligned Short Fiber Composite Materials for Rapid Manufacturing  | \$1,330,548 | \$0 | \$0       |
| 30 | 2018-10-06-30 | HE/University of Delaware | Effects of Prenatal Maternal Stress from Hurricane Harvey on Early Brain<br>Development and School Readiness: The Harvey Mom Study                            | \$0         | \$0 | \$35,456  |
| 31 | 2018-10-06-31 | HE/University of Delaware | Dynamic Network Models of Transnational Migration Flows: Modeling the Influences of Social, Spatial, Demographic, Political, Disaster, and Economic Processes | \$0         | \$0 | \$278,287 |
| 32 | 2018-10-06-32 | HE/University of Delaware | Advanced Compound Semiconductor Device and Circuit for Low Power Applications   | \$0         | \$0 | \$150,000 |
| 33 | 2018-10-06-33 | HE/University of Delaware | NSF: Next-Generation Algorithms and Software for Numerical Computing with Multivariate Functions  | \$195,459   | \$0 | \$0       |
| 34 | 2018-10-06-34 | HE/University of Delaware | Simons FDN Singh 18   | \$0         | \$0 | \$550,000 |
| 35 | 2018-10-06-35 | HE/University of Delaware | Service Agreement between University of Delaware and Charles County Deptartment of Health   | \$0         | \$0 | \$4,000   |
| 36 | 2018-10-06-36 | HE/University of Delaware | MURI Proposal: Emergent Phenomena in Antiferromagnetic Hybrid Systems for THz Devices   | \$0         | \$0 | \$753,226 |
| 37 | 2018-10-06-37 | HE/University of Delaware | UD DFM Candidate Poultry Trial 3  | \$0         | \$0 | \$14,561  |
| 38 | 2018-10-06-38 | HE/University of Delaware | Chemistry-Biology Interface Predoctoral Training Grant 2019-2024  | \$2,241,200 | \$0 | \$0       |
| 39 | 2018-10-06-39 | HE/University of Delaware | U.S. East Coast Tsunami Hazard Mitigation Program   | \$0         | \$0 | \$44,236  |
| 40 | 2018-10-06-40 | HE/University of Delaware | RET Site: Collaborative Research: Solar Teachers  | \$19,231    | \$0 | \$0       |
| 41 | 2018-10-06-41 | HE/University of Delaware | NSF Special Graph Theory: Connections and Applications  | \$119,077   | \$0 | \$0       |
| 42 | 2018-10-06-42 | HE/University of Delaware | Discovery of Molecular Probes and Therapeutic Leads   | \$7,500,005 | \$0 | \$0       |
| 43 | 2018-10-06-43 | HE/University of Delaware | Disrupting the Tumor Microenvironment to Enhance Nanoparticle Penetration   | \$0         | \$0 | \$150,000 |
| 44 | 2018-10-06-44 | HE/University of Delaware | Statin for the Protection of Cartilage During Joint Inflammation  | \$1,112,597 | \$0 | \$0       |

| 45 | 2018-10-06-45 | HE/University of Delaware | An Integrated Pest Management Approach in Addressing the Multiple Herbicide-<br>Resistant Weed Epidemic in U.S. Field Crop Production (Delaware): Year 4             | \$289,999   | \$0 | \$0         |
|----|---------------|---------------------------|--|-------------|-----|-------------|
| 46 | 2018-10-06-46 | HE/University of Delaware | Preparation of National Historic Landmark Nomination for the Luther Sampson Joiner Shop Duxbury, Massachusetts   | \$0         | \$0 | \$16,303    |
| 47 | 2018-10-06-47 | HE/University of Delaware | Integrating Quantitative Modeling with High Spatiotemporal Resolution Imaging to Quantify the Impact of Membrane Architecture on EGFR Signaling                      | \$0         | \$0 | \$231,167   |
| 48 | 2018-10-06-48 | HE/University of Delaware | Metabolic Engineering to Redirect Acetate Fluxes in FGF21 Production Strain by Dynamic Metabolons  | \$0         | \$0 | \$64,103    |
| 49 | 2018-10-06-49 | HE/University of Delaware | MCAO FY 18-19 Salary and Benefits - Provencal  | \$0         | \$0 | \$121,139   |
| 50 | 2018-10-06-50 | HE/University of Delaware | Consulting Service Agreement Between University of Delaware and CCFH   | \$0         | \$0 | \$4,000     |
| 51 | 2018-10-06-51 | HE/University of Delaware | Assist in Rearing Wood-Boring Insects Such as Emerald Ash Borers and Asian Longhorned Borers and their Natural Enemies.  | \$11,000    | \$0 | \$0         |
| 52 | 2018-10-06-52 | HE/University of Delaware | Acquisition of Goods and Services: Laboratory Support for the Brown Marmorated Stink Bug, Spotted Wing Drosophila, Spotted Lantern Fly and Other Targets as Required | \$31,818    | \$0 | \$0         |
| 53 | 2018-10-06-53 | HE/University of Delaware | Nuvve Research Year 3 Funding  | \$0         | \$0 | \$504,588   |
| 54 | 2018-10-06-54 | HE/University of Delaware | NSF: Diffusions on Combinatorially Structured State Spaces   | \$118,878   | \$0 | \$0         |
| 55 | 2018-10-06-55 | HE/University of Delaware | 2019 Military 4-H Partnership Youth Camps  | \$0         | \$0 | \$22,906    |
| 56 | 2018-10-06-56 | HE/University of Delaware | Pfizer Cross Couplings of Alkyl Pyridinium Salts   | \$0         | \$0 | \$41,730    |
| 57 | 2018-10-06-57 | HE/University of Delaware | NIIMBL Global Health Fund  | \$0         | \$0 | \$1,500,000 |
| 58 | 2018-10-06-58 | HE/University of Delaware | ERP Evaluation of Perceptual Assimilation: English Vowel Perception for Japanese Speakers  | \$0         | \$0 | \$4,000     |
| 59 | 2018-10-06-59 | HE/University of Delaware | The Role of the Soil Microbiome in Pollinator Health   | \$516,059   | \$0 | \$0         |
| 60 | 2018-10-06-60 | HE/University of Delaware | RMB24 Deficiency Causes Microphthalmia and Anophthalmia in Mice  | \$0         | \$0 | \$2,499     |
| 51 | 2018-10-06-61 | HE/University of Delaware | Mechanisms Regulating Inflammation After Cataract Surgery  | \$0         | \$0 | \$2,028     |
| 62 | 2018-10-06-62 | HE/University of Delaware | Sex-Specific Roles of Topoisomerase II in Meiosis  | \$1,250,000 | \$0 | \$0         |

| 63 | 2018-10-06-63 | HE/University of Delaware | Regulation of Heme Synthesis by Mitochondrial Proteins   | \$1,250,000 | \$0 | \$0       |
|----|---------------|---------------------------|--|-------------|-----|-----------|
| 64 | 2018-10-06-64 | HE/University of Delaware | Healthy Sleep as a Target to Optimize Response to Standard Nicotine<br>Dependence Treatment and Reduce Cancer Risk in Smokers    | \$3,109,843 | \$0 | \$0       |
| 65 | 2018-10-06-65 | HE/University of Delaware | Bridge to the Baccalaureate and Beyond   | \$1,182,779 | \$0 | \$0       |
| 66 | 2018-10-06-66 | HE/University of Delaware | Mechanisms of Symbiotic Nitrogen (N)-Fixing Bacterial Interactions with Plant Growth Promoting Rhizobacteria                     | \$444,552   | \$0 | \$0       |
| 67 | 2018-10-06-67 | HE/University of Delaware | Biomaterial Template to Enhance Tendon-to-Bone Enthesis Regeneration   | \$0         | \$0 | \$227,898 |
| 68 | 2018-10-06-68 | HE/University of Delaware | NSF Problems in Extremal Combinatorics and Finite Geometry   | \$194,378   | \$0 | \$0       |
| 69 | 2018-10-06-69 | HE/University of Delaware | Fall-Recovery Training to Enable Walking Activity in those with Chronic Stroke   | \$1,823,067 | \$0 | \$0       |
| 70 | 2018-10-06-70 | HE/University of Delaware | Health Management Associates Opioid Systems  | \$0         | \$0 | \$45,517  |
| 71 | 2018-10-06-71 | HE/University of Delaware | Collaborative Research: Machine Learning Framework for Predictive Modeling of Invariant Features in the Submesoscale             | \$0         | \$0 | \$793,462 |
| 72 | 2018-10-06-72 | HE/University of Delaware | Collaborative Research: Atomic-Scale Crystalline Hybrids: Tuning the IR Dielectric Function through Optic Phonon Hybridization   | \$128,069   | \$0 | \$0       |
| 73 | 2018-10-06-73 | HE/University of Delaware | RI: Medium: Collaborative Research: Mission Impossible: Cooperative Physical Interactions in Heterogeneous Robot Teams           | \$461,871   | \$0 | \$0       |
| 74 | 2018-10-06-74 | HE/University of Delaware | NSF Application of Graph Limits to the Seriation Problem   | \$103,995   | \$0 | \$0       |
| 75 | 2018-10-06-75 | HE/University of Delaware | NSF Functions with Applications to Design Theory and Cryptology  | \$220,333   | \$0 | \$0       |
| 76 | 2018-10-06-76 | HE/University of Delaware | NSF The Additive Combinatorics of Probability Measures   | \$267,566   | \$0 | \$0       |
| 77 | 2018-10-06-77 | HE/University of Delaware | Collaborative Research: Unraveling Bronsted Acidity in Zeolites; A Quantum Dynamical Approach                                    | \$405,797   | \$0 | \$0       |
| 78 | 2018-10-06-78 | HE/University of Delaware | Conservation of Juvenile Atlantic Sturgeon in the Delaware River Basin   | \$0         | \$0 | \$16,560  |
| 79 | 2018-10-06-79 | HE/University of Delaware | Molecular Markers for Detection of Quarantine Significant Phytoplasmas in<br>Agriculturally and Environmentally Important Plants | \$58,180    | \$0 | \$0       |
| 80 | 2018-10-06-80 | HE/University of Delaware | Reducing Stormwater Runoff with Biochar Addition to Soils in Baltimore Gas & Electric Right-of-Way                               | \$0         | \$0 | \$36,810  |

| 81 | 2018-10-06-81 | HE/University of Delaware | Decoding the Brain's Response to Social Cues   | \$0         | \$0 | \$1,000   |
|----|---------------|---------------------------|--|-------------|-----|-----------|
| 82 | 2018-10-06-82 | HE/University of Delaware | Examining the Role of Estrogen in a Rodent Model of PTSD   | \$0         | \$0 | \$1,000   |
| 83 | 2018-10-06-83 | HE/University of Delaware | ABC Dissemination and Sustainability   | \$0         | \$0 | \$148,148 |
| 84 | 2018-10-06-84 | HE/University of Delaware | Instant k-Space Tomography for Spatial-Spectral Monitoring   | \$0         | \$0 | \$160,256 |
| 85 | 2018-10-06-85 | HE/University of Delaware | An fNIRS Study of Neural Correlates of Imitation in Children with and without ASD  | \$275,000   | \$0 | \$0       |
| 86 | 2018-10-06-86 | HE/University of Delaware | Developing a Novel Single Molecule Imaging Method for Detection of Circular RNAs   | \$400,000   | \$0 | \$0       |
| 87 | 2018-10-06-87 | HE/University of Delaware | Deep Learning Image Analysis For Detecting And Sizing Of Sea Scallops and Scallop Predators From Seabed Imagery And Side-Scan Sonar- Development And Implementation Of Convolutional Neural Networks For Survey Applications | \$117,208   | \$0 | \$0       |
| 88 | 2018-10-06-88 | HE/University of Delaware | Between A Rock And A Hard Dredge: A Study Of Sea Scallop Incidental Mortality in Very Hard Bottom Substrates Using Optical Surveys Implementing A BACI Protocol  | \$250,608   | \$0 | \$0       |
| 89 | 2018-10-06-89 | HE/University of Delaware | How do Gut Epithelium Cells Respond to Probiotics ?  | \$0         | \$0 | \$91,945  |
| 90 | 2018-10-06-90 | HE/University of Delaware | UPENN Center on Standards, Alignment, Instruction, and Learning (C-SAIL)   | \$0         | \$0 | \$31,977  |
| 91 | 2018-10-06-91 | HE/University of Delaware | Controlling Glycosylation and Increasing Cell Performance by Inhibiting Genes in the Glycolytic Pathway  | \$0         | \$0 | \$40,500  |
| 92 | 2018-10-06-92 | HE/University of Delaware | IR-4 Project 2017: Foliar Feeding Beetle Efficacy  | \$0         | \$0 | \$12,500  |
| 93 | 2018-10-06-93 | HE/University of Delaware | Collaborative Research: The Role of Behavior, Biochemistry, and Visual Physiology in Complex Bioluminescent Communication  | \$210,521   | \$0 | \$0       |
| 94 | 2018-10-06-94 | HE/University of Delaware | Steady Hypersonic Flight - Progress Towards Understanding Fluid Dynamic Stability of High-Speed Flows  | \$0         | \$0 | \$960     |
| 95 | 2018-10-06-95 | HE/University of Delaware | Umpolung Methods with Electron Rich Aromatic Systems: Ortho-Quinone Methides, Aza-Ortho-Xylylenes, and N,N-Dialkylaniline N-Oxides in Synthesis  | \$439,373   | \$0 | \$0       |
| 96 | 2018-10-06-96 | HE/University of Delaware | Linking Nitrate Removal from Stormwater Runoff to the Activity of Denitrifying Microbial Community in Biochar-Amended Soil   | \$0         | \$0 | \$864     |
| 97 | 2018-10-06-97 | HE/University of Delaware | PEW Latin American Fellows Program - Cintia Santiago   | \$0         | \$0 | \$60,000  |
| 98 | 2018-10-06-98 | HE/University of Delaware | Mechanisms Contributing to Hypertension in Postmenopausal Women  | \$1,879,460 | \$0 | \$0       |

| 99  | 2018-10-06-99 | HE/University of Delaware | Measuring Symptom Clusters in People with Sudden-Onset Disabilities   | \$2,904,252 | \$0 | \$0       |
|-----|---------------|---------------------------|---|-------------|-----|-----------|
| 100 | 2018-10-07-01 | HE/University of Delaware | Advanced Anion Exchange Membranes for Solar-to-Hydrogen Generators  | \$0         | \$0 | \$48,077  |
| 101 | 2018-10-07-02 | HE/University of Delaware | Advanced Anion Exchange Membranes for All-Vanadium Flow Batteries   | \$0         | \$0 | \$48,077  |
| 102 | 2018-10-07-03 | HE/University of Delaware | Theoretical Studies of Intermolecular Forces  | \$363,051   | \$0 | \$0       |
| 103 | 2018-10-07-04 | HE/University of Delaware | Quantification of Spontaneously Produced Bradyrhizobium Phages from Plant Root Nodules  | \$0         | \$0 | \$994     |
| 104 | 2018-10-07-05 | HE/University of Delaware | Elucidating the Mechanism of CK2.3 Mediated Osteogenesis  | \$0         | \$0 | \$956     |
| 105 | 2018-10-07-06 | HE/University of Delaware | Mechanism of 5'-Tyrosyl-DNA Phosphodiesterase (tdpt-1) Mediated Suppression of DNA Topoisomerase 2 (top-2) during Meiosis in C. Elegans | \$0         | \$0 | \$987     |
| 106 | 2018-10-07-07 | HE/University of Delaware | Characterization of a New Transcription Factor Zbtb8b in Mouse Lens Cells   | \$0         | \$0 | \$2,485   |
| 107 | 2018-10-07-08 | HE/University of Delaware | Computational Approaches to Characterizing the Avian Respiratory Viral Microbiome   | \$0         | \$0 | \$1,000   |
| 108 | 2018-10-07-09 | HE/University of Delaware | Ultrafast Spin Physics in Insulating Meta-Magnetic Structures   | \$223,973   | \$0 | \$0       |
| 109 | 2018-10-07-10 | HE/University of Delaware | Regulation of Erythroid Heme Synthesis by the Ubiquitous Mitochondrial Unfoldase, CLPX  | \$0         | \$0 | \$300,000 |
| 110 | 2018-10-07-11 | HE/University of Delaware | Health Consequences of Fear of Cancer Recurrence in Breast Cancer Survivors and Partners  | \$3,097,451 | \$0 | \$0       |
| 111 | 2018-10-07-12 | HE/University of Delaware | Sex Differences in Subclinical CVD, Brain, and Cognition Associations   | \$2,261,045 | \$0 | \$0       |
| 112 | 2018-10-07-13 | HE/University of Delaware | Nurse Practitioner Employment in Ambulatory Physician Practices to Improve Patient Outcomes and Medicare Costs                          | \$0         | \$0 | \$200,212 |
| 113 | 2018-10-07-14 | HE/University of Delaware | Reduction of Energy, Water, and Hazardous Material Technical Assistance for Food and Beverage Manufacturers in the Mid-Atlantic Region  | \$147,907   | \$0 | \$0       |
| 114 | 2018-10-07-15 | HE/University of Delaware | 2019 Poultry Disease Outbreak Management and Regionalization (PDMOR) Symposium - UD Training Program                                    | \$96,524    | \$0 | \$0       |
| 115 | 2018-10-07-16 | HE/University of Delaware | Amendment to Practice Defaults and Enrollment in the Conservation Reserve Program   | \$125,000   | \$0 | \$0       |
| 116 | 2018-10-07-17 | HE/University of Delaware | Permafrost Modeling in the Dry Andes, Argentina   | \$0         | \$0 | \$14,000  |

| 117 | 2018-10-07-18 | HE/University of Delaware    | Small Business Administration Cooperative Agreement FY18-19  | \$562,190 | \$428,448 | \$0 |
|-----|---------------|------------------------------|--|-----------|-----------|-----|
| 118 | 2018-10-13-01 | HE/Delaware State University | 2020 Health Fund Program   | \$154,325 | \$0       | \$0 |
| 119 | 2018-10-13-02 | HE/Delaware State University | International Biotechnology Academy for Research (I-BARS)  | \$399,842 | \$0       | \$0 |
| 120 | 2018-10-13-03 | HE/Delaware State University | Analysis of Specific Spoilage Organisms and Other Bacteria Isolated from Food and Agriculture Products | \$48,000  | \$0       | \$0 |